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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,750	01/17/2006	Masahiko Ishida	Q92709	1790
23373 7590 09/24/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER HITE-SHEW, FELISA CARLA	
			ART UNIT	PAPER NUMBER
			1792	
			MAIL DATE	DELIVERY MODE
			09/24/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/564,750

## Applicant(s)

ISHIDA ET AL.

## Examiner

Felisa C. Hiteshew

## Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 31 and 33 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-19, 26-27 and 30 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 20-25 is/are rejected.
- 7) ☐ Claim(s) 21-23 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/17/06 & 08/16/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

The PTOL 1449s of 01/17/2006 and 08/16/2006 have been received, reviewed and considered.

***Specification***

2. The disclosure is objected to because of the following informalities: The continuing information needs to be corrected in the specification.

In the specification, line 1, please insert the following:

--This application is a 371 of PCT/JP04/10301 07/20/2004--.

Appropriate correction is required.

3. Claims 31 and 33 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim a claim can not be dependent upon another dependent claim. See MPEP § 608.01(n). Accordingly, the claims 31 and 33 have not been further treated on the merits.

***Claim Rejections - 35 USC § 112***

4. Claims 6, 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims, line 2, the terminology "...negative-type" is being considered vague and indefinite. The addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. *Ex Parte Copenhaver*, 109 USPQ 118 (Bd. App. 1955).

In claim 28, line 2, the terminology "...predetermined volume..." is being deemed vague and indefinite.

In claim 29, line 2, the terminology "...predetermined volume..." is being deemed vague and indefinite.

A claim is indefinite where it specifies "predetermined" temperatures, etc..., when "predetermined" according to applicant's (or applicants') definition, merely means determined before hand. See *Seagrams & Sons Inc., vs. Mattell*, 84 U.S.P.Q.180. Therefore, the claim(s) is/are unpatentable under 35 U.S.P.Q. 112 second paragraph.

The use of "predetermined" reads on a nebulous mental step conducted prior to the manipulative steps of the claimed invention, hence rendering the present process claims unclear in meaning and scope. If applicant wishes to patent detailed controls over the recited process, they must be positively recited.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-11, 20 and 24-25 are rejected under 35 U.S.C. 102 (b) as being anticipated by Japanese Patent 2002-285335 A.

JP '335 A teaches a CVD method for fixing a catalytic pattern for producing a carbon nanotube, comprising: the catalytic pattern for producing a carbon nanotube is

formed on the surface of a substrate. As a manufacturing method of the substrate in this case, detailed fine pores are made to a (i) substrate, and the method of forming a minute catalyst particle on a substrate by etching of the method of embedding a catalyst particle on a substrate by etching of the method of embedding a catalyst particle there and a (ii) metal plate, etc... are known. The catalytic pattern is formed, wherein a pattern consisting of a mixture containing a photosensitive material and a catalyst is previously formed on the substrate, by removing the photosensitive material contained in the pattern (See paragraphs 5, 9, 14-15, 26, 38 and 45).

***Allowable Subject Matter***

6. Claims 12-19 are allowed.
7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).
8. Claims 21-23, 26-27, 30 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach nor render obvious the instantly claimed invention. There is no teaching in the art to perform the process that is now claimed.

The prior art does not teach the CVD method, as stated in the instant invention. There is no motivation in the art to change the prior art's teaching of to arrive at the instantly claimed process.

Any minor differences in the limitations of the dependent claims have been considered. This statement is meant to include limitations such as

Furthermore, any such differences are deemed to be result-effective variables that one of ordinary skill in the art would be expected to manipulate to advantage. Additionally, such limitations can be considered to have been simply known as conventional to the artisan practicing in the art at the time the invention was made and/or were common practices which were so well known in the art that they would have been taken for granted. If applicant believes that one or more limitations are critical to the invention, then applicant should amend the claims to reflect such critical limitations as well as indicate where in the specification such critical limitations were discussed and demonstrated.

The limitations of all claims have been considered and are deemed to be within the purview of the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felisa Hiteshew whose telephone number is (571) 272-1463. The examiner can normally be reached on Mondays through Thursday from 5:30 AM to 4:00 PM with Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mikhail Kornakov, can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-1463.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866- 217-9197 (toll-free).

/Felisa C. Hiteshew/  
Primary Examiner, Art Unit 1792